

Appl. No. 10/774,551
Amdt Dated August 18, 2006
Reply to Office Action of May 19, 2006

Attorney Docket No. 81716.0120
Customer No.: 26021

BEST AVAILABLE COPY

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently amended): A ceramic circuit board comprising:

a ceramic substrate having a through hole;

a metal column arranged within the through hole; and

metal circuit plates attached to both surfaces of the ceramic substrate in such a way as to stop up the through hole,

wherein the metal circuit plates attached to both surfaces of the ceramic substrate are connected to each other by the metal column,

and wherein, between an inner wall surface of the through hole and an outer wall surface of the metal column is secured a space defining a cavity, wherein the cavity is free from any material, and wherein the space defining the cavity exists along the entire length of the metal column.

10. (Original): The ceramic circuit board of claim 9,

wherein the metal circuit plate is made of copper or aluminum.

11. (Original): The ceramic circuit board of claim 9,

wherein the metal column is made of copper or aluminum.

12-15. (Canceled).

Appl. No. 10/774,551
Amdt. Dated August 18, 2006
Reply to Office Action of May 19, 2006

Attorney Docket No. 81716.0120
Customer No.: 26021

BEST AVAILABLE COPY

16. (Canceled)

17. (Previously presented): The ceramic circuit board of claim 9,
wherein a distance between the inner wall surface of the through hole
and the outer wall surface of the metal column is in a range of 30 to 200 μm .

18. (Previously presented): The ceramic circuit board of claim 9,
wherein the metal circuit plate has its surface plated with a layer
made of nickel.

19. (Previously presented): The ceramic circuit board of claim 18,
wherein the plate layer is made of a nickel-phosphorous amorphous
alloy containing phosphorous in an amount of 8 to 15 wt%.

20. (Previously presented): The ceramic circuit board of claim 18,
wherein the plate layer is 1.5 to 3 μm thick.

21. (Previously presented): The ceramic circuit board of claim 9,
wherein the metal column has a diameter of 200 μm or above.